

REMARKS

The examiner withdrew the rejection of claims 16-24 and 29 under 35 U.S.C. § 101 in response to Applicant's claim amendments.

The examiner withdrew the rejections of claims 1-9, 15-24, 29, and 30 under 35 U.S.C. § 112, ¶2 in response to Applicant's claim amendments. The examiner applied new rejections.

35 U.S.C. 112

The examiner rejected Claims 1-9, 15-24, 29, and 30 under 35 U.S.C. 112, second paragraph, as being indefinite. The examiner stated:

Claim 1 recites the functionality of "[monitoring] at least a portion of the trading of said discrete securities in a market with trading occurring outside of a regular trading session of the market being monitored." The phrase "with trading occurring outside of a regular trading session of the market being monitored" describes the market being monitored, but it does not necessarily define when the monitoring occurs. Does the monitoring of at least a portion of the trading of said discrete securities always occur or just during after hours trading periods?

If the monitoring covers an after hours trading period, how is this monitoring relevant to the claimed invention as a whole? The next limitation in claim 1 recites "calculate, based on prices at which the monitored discrete securities trade, the predicted opening index price of the security index for the beginning of the next regular trading session with respect to a closing index price of said security index at the end of the previous regular trading session." If prices are only monitored during the after hours trading period, then how is the predicted opening index price calculated with respect to a closing index price?

Claim 1 also recites "wherein said index prices are indicative of a cumulative value of said discrete securities." It is not clear to which index prices "said index prices" refer. The only previously recited index prices are "the predicted opening index price of the security index for the beginning of the next regular trading session" and "a closing index price of said security index at the end of the previous regular trading session." If these two index prices are the "index prices" being referenced in the last wherein clause of claim 1, then how are they indicative of a cumulative value of said discrete securities?

If one is trying to predict the opening index price of a security index (as set forth in the preamble), then how can such a calculation be based on the predicted opening index price of the security index? Furthermore, how do the after hours trading prices come into play in making such a prediction, if at all? Even though the calculation is "based on prices at which the

monitored discrete securities trade," it is not clear when the monitoring occurs. Thus, it is not clear upon which prices the calculation is based.

Additionally, even if claim 1 were amended to clearly limit all monitoring to after hours trading and the calculations were solely based on a closing index price and after hours pricing, it is still not clear how such data is used to predict an opening index price.

An opening index price is often equated to the price at which a security last traded. If securities may be traded after hours, then the last transaction that occurs after hours for each security becomes the last trade for each respective security. Claim 1 would still fail to provide any groundwork for a prediction of an opening index price (which implies more analysis than merely setting the next day's opening index price as the price at which the last trade occurred). At present, there appear to be missing steps that would otherwise be needed to set forth an actual predictive algorithm. Again, merely setting an opening index price as equal to a price at which a security last traded is not a prediction per se. Instead, a prediction would imply some guesswork, ideally based on an educated line of reasoning.

The claims that depend on claim 1 fail to remedy the aforementioned problems and therefore are rejected under the same rationale.

Independent claims 16, 17, and 30 recite similar limitations as those discussed in the rejections of claim 1 under § 112, 2" paragraph above; therefore, the same rejections apply to claims 16, 17, 30, and their respective dependent claims.

Applicant has carefully reviewed, and as necessary, amended claims 1-30, and contends that the claims, as presented, are definite and particularly point out and distinctly claim what Applicant considers to be Applicant's invention.

Applicant has amended claim 1 to recite: "A computer, for calculating a predicted opening index price of a security index that includes at least two discrete securities, ... comprising ... a computer readable medium storing ... computer-executable instructions to ... monitor at least a portion of trading of said discrete securities in a market with trading occurring outside of a regular trading session of the market being monitored; and calculate, based on prices at which the monitored discrete securities trade, the predicted opening index price of the security index for the beginning of the next regular trading session with respect to a closing index price of said security index at the end of the previous regular trading session, wherein said index prices are indicative of a cumulative value of said discrete securities."

The examiner contends that: "The phrase "with trading occurring outside of a regular trading session of the market being monitored" describes the market being monitored, but it does not necessarily define when the monitoring occurs. Does the monitoring of at least a portion of the trading of said discrete

securities always occur or just during after hours trading periods?" Applicant responds that exactly when the monitoring occurs is not needed to distinguish the claimed subject matter over the prior art. What is relevant is that the monitoring is of trading that occurs "after hours." While it would be reasonable and logical that the monitoring occur contemporaneously with trading it is not necessary.¹ All that is necessary is that the monitor occur prior the time when the predicted opening index price is calculated.

Next, the examiner questioned: **"If the monitoring covers an after hours trading period, how is this monitoring relevant to the claimed invention as a whole?"** Applicant responds that monitoring of after hours trading is relevant to the invention as a whole by virtue of carrying out the feature of the preamble taking into consideration any price variation that occurs in after hours trading and is specifically tied to the instructions to calculate, namely, "calculate, based on prices at which the monitored discrete securities trade, the predicted opening index price of the security index for the beginning of the next regular trading session with respect to a closing index price of said security index at the end of the previous regular trading session."²

The examiner also argued: **"It is not clear to which index prices "said index prices" refer."** Applicant has amended the claims to make what Applicant consider clear, even more explicit, that is by reciting "with the predicted opening and closing index prices being indicative of a cumulative value of said discrete securities." The examiner also argued: **"If these two index prices are the "index prices" being referenced in the last wherein clause of claim 1, then how are they indicative of a cumulative value of said discrete securities?"** Applicant contends that the specification clearly describes security indexes and how cumulative values of the individual securities that comprise the index are involved in determining an indicative value for the index. One of skill in this art, would have no difficulty in understanding this feature.

The examiner also argued: **"If one is trying to predict the opening index price of a security index (as set forth in the preamble), then how can such a calculation be based on the predicted opening index price of the security index? Furthermore, how do the after hours trading prices come into play in making such a prediction, if at all? Even though the calculation is "based on prices at which the monitored discrete**

¹ Additional guidance is provided from Applicant's specification See p. 9 lines 4-27.

² Id.

securities trade," it is not clear when the monitoring occurs. Thus, it is not clear upon which prices the calculation is based.³ Applicant responds that the claim is clear on its face - the predicted opening index price is calculated based on prices at which the monitored discrete securities trade with respect to a closing index price of said security index at the end of the previous regular trading session. Therefore, it is clear that the calculation is based on the monitored discrete securities' trade prices and the closing index price at the end of the previous regular trading. Applicant gives two different examples one for a market capitalization weighted index and the other for a stock weighted index.³

The examiner also argues: "An opening index price is often equated to the price at which a security last traded. If securities may be traded after hours, then the last transaction that occurs after hours for each security becomes the last trade for each respective security." The examiner is referred to Applicant's specification and the discussion pertaining to "closing price variation process" for details of this calculation. Applicant need not recite the details in the claims, at this point because the claims already distinguish over the cited art.

The examiner also stated:

Because claims 1-9, 15-24, 29, and 30 are so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of these claims. See *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962); *Ex parte Brummer*, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also *In re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). However, the Examiner maintains the previously asserted art rejection to convey the Examiner's best understanding of the claimed invention at present."

Applicant believes that it is improper for the examiner to conduct piecemeal prosecution.⁴ The examiner is required to provide Applicant all prior art rejections that the examiner is aware of. Further Applicant reminds the examiner that this is the fourth substantive action in this case and the first time that the examiner has set forth such clearly improper arguments.

Accordingly, Applicant contends that the claims as presented are proper under 35 U.S.C. 112, second paragraph and these rejections should be withdrawn.

³ Specification pages 9-15.

⁴ See MPEP 707.07(g)Piecemeal Examination

35 U.S.C. 102

The examiner rejected Claims 1-3, 16-19, and 30 under 35 U.S.C. 102(e) as being anticipated by Ciampi et al. (U.S. Patent No. 7,167,837).

Applicant stands by previous arguments⁵ that Ciampi does not monitor the after-hours trading of a security but rather determines the value of underlying mutual-fund assets that are traded at different hours of the day from that of the mutual fund. Claim 1 requires "instructions to monitor at least a portion of the trading of said discrete securities in a market with the trading occurring outside of a regular trading session of the market being monitored." The monitoring recited in claim 1 applies to the trading that occurs on a particular market during *that* market's after-hours trading session -- not during the after-hours trading sessions of other markets or during normal trading sessions of that market. While, it is clear that monitoring of markets occurs while the markets trade, it is the monitoring of the trading of the securities outside of a regular trading session that is the subject matter missing in Ciampi.

Ciampi does not disclose this feature of claim 1 nor the other features for at least the reasons presented earlier during prosecution.⁶ For example, at col. 5, lines 1-14, Ciampi discloses determining the value of the second set of assets that are traded at different hours of the day than that of the mutual fund. However, these hours are nowhere disclosed or suggested to be after hours trading. Rather, Ciampi's second set of assets are merely international assets that are traded in different countries that trade at different times than a US based mutual fund.⁷

Claims 16, 17, and 30 also require monitoring the trading of discrete securities in a market that occur outside of a regular trading session of the market being monitored and distinguish over Ciampi for at least the same reasons as claim 1.

35 U.S.C. 103

The examiner rejected Claims 4-9 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ciampi et al. (U.S. Patent No. 7,167,837), as applied to claims 1, 3, 17, and 19

⁵ Applicant's Amendment of September 22, 2008; March 20, 2009

⁶ See Applicant's Amendment of September 22, 2008.

⁷ See Ciampi Col. 4, lines 55-56 and 65-67; Col. 5, lines 2,3.

above, in view of the Securities and Exchange Commission's release no. 34-41 11 2, file no. SR-CBOE-99-05, entitled "Self-Regulatory Organizations; Order Granting Accelerated Approval of Proposed Rule Change and Notice of Filing and Order Granting Accelerated Approval of Amendment No. 1 to Proposed Rule Change by the Chicago Board Options Exchange, Incorporated Relating to Listing of Options on the Dow Jones E*Commerce Index" (herein referred to as E*Commerce Index).

The examiner also rejected Claims 15 and 29 under 35 U.S.C. 103(a) as being unpatentable over Ciampi et al. (U.S. Patent No. 7,167,837), as applied to claims 1 and 17 above, in view of Delta et al. (US 2002101 5671 7 A1).

Claims 4-9, 15, 20-24 and 29 are allowable at least for the reasons discussed in their respective base claims.

No fee is due. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: November 20, 2009

/Denis G. Maloney/
Denis G. Maloney
Reg. No. 29,670

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (877) 769-7945